Amendments to the Claims

1. (Currently Amended) A method for spatially compositing digital video images with a tile pattern library, comprising the steps of:

(b)   choosing a tile pattern from the tile pattern library;

(c)   creating a compositing window within a display area of a compositor, wherein a first shape of said created compositing window matches a second shape of a periphery of said chosen tile pattern and wherein said created compositing window is formed by pixels within the display area;

(d)   decomposing said created compositing window into a first number of contiguous tiles, wherein the first number of tiles equals the amount a second number of tiles in said chosen tile pattern and is one of equal to and less than a third number of graphics pipelines, wherein a third shape and a first position of each of the tiles matches a fourth shape and a second position of a corresponding tile in said chosen tile pattern, and wherein each of the tiles is formed by pixels within the display area;

(e)   assigning each tile of the tiles to a corresponding digital video display unit of a corresponding graphics pipeline of the graphics pipelines; and

(f)   receiving, at each tile of the tiles, an image output of said assigned corresponding digital video display unit, thereby spatially compositing digital video images with a the tile pattern library.

2. (Currently Amended) The method of claim 1, further comprising beforehand the step of:

(a) counting the digital video display units ~~whose~~ from which the image outputs will be spatially composited by the compositor such that said counted digital video display units determines a maximum for the ~~amount~~ second number of the tiles in said chosen tile pattern.

3. (Currently Amended) The method of claim 2, wherein steps (a) to (f) are performed for each frame in a dynamic sequence of frames of the digital video images.

4. (Currently Amended) The method of claim 2, wherein ~~the~~ parameters that define each of the tiles are variable.

5. (Original) The method of claim 4, wherein an area of each of the tiles is a function of a complexity of the image output of said assigned corresponding digital video display unit.

6. (Original) The method of claim 5, wherein said chosen tile pattern takes into account the complexity of the image output of each of said counted digital video display units.

7. (Original) The method of claim 5, wherein the function is an inverse function.

8. (Original) The method of claim 2, wherein steps (a) to (f) are performed by a tile compositing controller.

9. (Currently Amended) The method of claim 2, further comprising after step (d), the step of communicating, to the compositor, the first parameters that define the compositing window and the second parameters that define each of the tiles.

10. (Currently Amended) The method of claim 9, wherein said communicating step occurs within a frame of the digital video images.

11. (Currently Amended) The method of claim 9, wherein said communicating step occurs through a first channel separate from a second channel used to communicate a the frame of the digital video images.

12. (Currently Amended) The method of claim 9, wherein said communicating step minimizes an amount of data needed to convey the first parameters that define the compositing window and the second parameters that define each of the tiles.

13. (Currently Amended) The method of claim 12, wherein said communicating step comprises obtaining, from the tile pattern library, an index code that identifies said chosen tile pattern, wherein the index code minimizes the amount of the data needed to

convey the first parameters that define the compositing window and the second parameters that define each of the tiles.

14. (Currently Amended) A system for spatially compositing digital video images with a tile pattern library, comprising:

(a)   a tile pattern chooser to choose a tile pattern from the tile pattern library;

(b)   a compositing window creator to create a compositing window to reside within a display area of the compositor, wherein a first shape of the compositing window created by said compositing window creator matches a second shape of a periphery of the tile pattern chosen by said tile pattern chooser and wherein the compositing window created by said compositing window creator is formed by pixels within the display area;

(c)   a decomposer to decompose the compositing window created by said compositing window creator into a first number of contiguous tiles, wherein the first number of tiles equals the amount a second number of tiles in the tile pattern chosen by said tile chooser and is one of equal to and less than a third number of graphics pipelines, wherein a third shape and a first position of each of the tiles matches a fourth shape and a second position of a corresponding tile in said chosen tile pattern, and wherein each of the tiles is formed by pixels within the display area;

(d)   a tile assigner to assign each tile of the tiles to a corresponding digital video display unit of a corresponding graphics pipeline of said graphics pipelines; and

(e)   an image transmitter to transmit, to each tile of the tiles within the display area of the compositor, an image output of the corresponding digital video display unit assigned by said tile assigner, thereby spatially compositing the digital video images with ~~a~~ the tile pattern library.

15. (Currently Amended) The system of claim 14, further comprising a counter to count digital video display units ~~whose~~ from which the image outputs will be spatially composited by the compositor such that the digital video display units counted by said counter determines a maximum for the ~~amount~~ second number of tiles in the tile pattern chosen by said tile pattern chooser.

16. (Currently Amended) The system of claim 15, ~~wherein said system is~~ further comprising a tile compositing controller.

17.   (Currently Amended)   The system of claim 15, further comprising a communications medium to communicate, to the compositor, ~~the~~ first parameters that define the compositing window and ~~the~~ second parameters that define each of the tiles.

18. (Original) The system of claim 17, wherein said communications medium meets Digital Visual Interface specifications.

19. (Original) The system of claim 18, wherein said communications medium is a Transitional Minimized Differential Signal data link.

20. (Currently Amended) The system of claim 19, wherein said communications medium is within a frame of the digital video images.

21. (Original) The system of claim 18, wherein said communications medium is an Inter Integrated Circuit bus.

22. (Currently Amended) The system of claim 17, wherein said communications medium minimizes an amount of data needed to convey the first parameters that define the compositing window and the second parameters that define each of the tiles.

23. (Currently Amended) The system of claim 22, wherein said communications medium comprises an index code obtainer to obtain, from the tile pattern library, an index code that identifies the tile pattern chosen by said tile pattern chooser, wherein the index code minimizes the amount of the data needed to convey the first parameters that define the compositing window and the second parameters that define each of the tiles.